# national**grid**

via email

April 1, 2022

Attorney J. Raymond Miyares Miyares Harrington 40 Grove Street, Suite 190 Wellesley, MA 02482

Lisa Kent City Clerk 191 Cabot Street Beverly, MA 01915

Re: Petition of New England Power Company for a Grant of Location for Electric Transmission Lines (N-192 Cable Replacement Project)

Dear Attorney Miyares:

Thank you for your letters of March 25, 2022. In the responses below and in the attached materials New England Power Company (the Company or NEP) supplements its prior responses and provides the additional information that the City Council seeks. The Company provide these responses and materials subject to the objections articulated in its initial March 21, 2022 submission. Please note that the Company has not withheld any information because of those objections or because the information was already provided to other City offices or officials.

## **Supplemental Responses to Requests for Information**

1. **Technical Drawings.** Please supplement the plans provided with your petition, to include both profile and cross-section technical drawings depicting the proposed alignment of the electric transmission lines in the public way and the existing alignment of other above- and below-ground infrastructure. The technical drawings you submit should be the most current versions available and should be comparable to those submitted to the Energy Facilities Siting Board ("EFSB") on March 4, 2020, in docket EFSB 19-04.

Supplemental Response: In light of the City's withdrawal of its objection to disclosure, the Company provides the plan and profile drawings as **Exhibit A**. As previously noted, field conditions inevitably cause some minor deviations in the route as shown on the construction drawings. Any such changes will be shown on as-built plans that will be submitted to the City following Project construction.

4. Beverly #12 Substation Transformer. Condition J of the EFSB's Final Decision in 19-04 requires the reduction in project sound levels near a residence on Marshall Court. NEP filed a letter of compliance with Condition J stating that NEP will use a special type of transformer to reduce sound levels. Please furnish a description and technical information concerning the specified transformer.

**Supplemental Response**: The Company provides the manufacturer's specifications for the transformer as **Exhibit B**. In the top left corner of this plan, there is a line that states: "Guaranteed Sound Level ONAN: 57 db(A) ONAF: 60 db(A) ONAF: 60 db(A)". ONAN means "oil natural air natural" and indicates the noise levels when the transformer fans are not running. ONAF means "oil natural air forced" and indicates the noise levels when the transformer fans are running to cool the interior oil.

Of note, the maximum guaranteed sound level of 60db(A) is 5db(A) less than what was assumed in the sound study that the Company had prepared to evaluate noise impacts created by adding a new transformer to Beverly #12 Substation. (See **Exhibit C**.) The study found that even with the new transformer sound from the property would still be compliant with the 10-dBA incremental increase allowed by the both the Beverly Noise Control Ordinance and the MassDEP Noise Policy. The study also found that the transformer would not produce any pure tones.

6. Staging, Storage and Laydown Areas. Please identify all locations, whether on public or private land, that NEP contemplates will be used as staging, storage or laydown areas for the project, or that otherwise will receive or store project-related equipment or materials (including dirt or other materials excavated from the project route) or may serve as parking for project workers.

**Supplemental Response**: McCourt Construction's laydown and staging area will be located on the property identified by the City Assessor as 56-37.

McCourt Construction's use of the site will include the following activities: parking for personal vehicles; parking for construction vehicles and equipment; locating Connex boxes for small tools and storage; temporarily depositing excavated soils removed from City streets; storing steel plates and shoring material; storing traffic control devices (e.g., cones, barrels and sign boards).

McCourt Construction will need to use Brimbal Avenue; however, the movement of materials and construction vehicles generally will occur outside of school hours and bus drop-off and pick-up times. The Company has prepared a comprehensive Traffic Management Plan in consultation with City officials to ensure public safety at all times during Project construction.

10. EMF Pre- and Post-Construction Monitoring. Please provide a proposed plan for both preand post-construction monitoring of electromagnetic fields along the project route.

<u>Supplemental Response</u>: NEP has no objection to implementing a pre- and post-operation magnetic field (MF) measurement protocol consistent with the one developed in EFSB 18-03 and EFSB 16-02. NEP will consult with Commissioner Collins regarding the locations of measurements.

11. Pre-Construction Video Sweep. Please provide a proposed plan for a pre-construction video sweep, from the public way, of all properties along the project route to document pre-construction conditions prior to commencement of the project.

<u>Supplemental Response</u>: NEP has no objection to performing video sweeps from the public way prior to commencement of the Project to document the pre-construction conditions of the exteriors of the abutting properties along the Project route. NEP has already requested that appropriate Project vendor provide this service.

14. Sewer and Storm Drain Survey. Please provide a proposed plan to conduct a closed-circuit interior video recording of the existing City sewer and drain structures and components along the project route prior to project commencement.

<u>Supplemental Response</u>: NEP agrees to perform the video surveys consistent with the Memorandum of Agreement between Eversource and Woburn that you reference in your letter. (EFSB 18-03 (Memo. including EMF monitoring docketed on Feb. 21, 2019).) This issue was governed by Section 2.12 of that MOA, which I have reproduced below and edited to fit this Project:

### 2.12. Sewer and Storm Drain Survey.

- 2.12.1. [NEP] or its contractor shall make a closed-circuit interior video recording of the existing City sewer and drain structures and components along the Project route prior to commencing construction. [NEP] or its contractor shall, where necessary, clean existing City sewer and drain structures and components along the Project route prior to making the video recording.
- 2.12.2. [NEP] shall provide the [Commissioner Collins] copies of the video recordings within a reasonable period.
- 2.12.3. Before commencing construction of the Project, [NEP] shall meet with the [Commissioner Collins] to develop, in good faith, mitigation, repair, or replacement procedures for sewer structures and components identified as needing mitigation, repair, or replacement by the City such that it does not unreasonably delay the start of the Project. Eversource is not responsible for pre-existing damage identified during the course of performing the cleaning and video recording of City sewer and drain structures.

18. Rodent Control Plan. Please provide a proposed plan for rodent control. Additionally, please provide copies of any proposed plan already submitted to the City's Health Department on this topic.

<u>Supplemental Response</u>: NEP is providing an updated Rodent Control Plan as **Exhibit D**. At the request of the City Department of Health, the Company increased to 14 days the time to set traps before the start of construction and added the last paragraph at the request of the Mayor's Office.

**21.** Archaeological Monitoring Plan/Report. Please provide a proposed plan for monitoring for archaeologically sensitive locations and/or burial grounds during construction of the proposed route and plan in the event that you encounter such during construction. Please also provide any reports or studies already conducted with respect to this issue.

<u>Supplemental Response</u>: As promised at the March 21<sup>st</sup> hearing, the Company consulted with The Public Archaeology Laboratory (PAL), Inc. and confirmed that we may disclose the *Post-Review Discoveries Plan* (Sept. 2021) that PAL prepared specifically for this Project. NEP provides that plan as **Exhibit E**.

NEP also provides as **Exhibit F** a Project Memorandum from PAL, dated September 16, 2020 in which PAL recommends performing intensive archaeological surveys and archaeological monitoring during construction at certain sensitive areas. PAL, in fact, recently provided archaeological monitoring during two days of test pit excavation on the Salem side of the Memorial bridge.

Please note that addressing cultural resources is a regular part of NEP's business. NEP has a mature and robust policy of carefully assessing and addressing potentially impacted cultural resources within its project areas. NEP is committed to the protection and preservation of cultural resources and to implementing measures that will avoid effects on any historic resources that may be present in road and MBTA ROW.

23. Dust Control Plan. Please provide a proposed dust control plan.

**Response**: NEP provides as **Exhibit G** a copy of the dust control procedure that NEP requires its contractor to establish pursuant to Paragraph  $\P9(a)$  of the MOA.

#### **Responses to Follow-Up Questions**

In a separate letter dated March 25, 2022, you requested that the Project team be prepared to respond to further questions regarding EMF and the MBTA ROW. The team will be prepared, but NEP thought it would be helpful to respond, at least in part, in advance.

1. Please have an NEP representative present at the hearing who is knowledgeable about and can discuss what actions NEP will take if it measures post-construction EMF levels at any point along the project route that are in excess of those modeled by NEP or those that may have been measured prior to construction.

**Response**: As noted above, NEP will develop and submit a protocol to measure MF before and after the new Cable is placed into service. It is important to note that the methods of calculating MF have been shown to be highly accurate and reliable meaning that, in the words of the City's expert, "the results of the model should be a very accurate representation of anticipated EMF associated with the project." See Letter from Richard R. Lester, CEP to Commissioner Collins (Oct. 28, 2021). It would be unlikely, therefore, if post-operation MF levels would differ materially from the levels calculated by Exponent and detailed in its report.

There are several important questions that would have to be considered before deciding whether additional mitigation was required. First, NEP has already designed the Project to mitigate EMF. The installation of the new Cable underground will effectively block all electric fields above ground. NEP also will install the new Cable in a delta configuration to minimizes MF levels.

Second, without more information about the source of MF, an exceedance of the calculated levels alone would not be grounds for further Project mitigation. As Dr. Bailey testified during the March 21<sup>st</sup> hearing, extremely low frequency (ELF) electric and magnetic fields surround all objects that generate, use, or transmit electricity, including appliances, wiring, and motors present in every home, and are also created by environmental sources. Consequently, people are constantly exposed to ELF EMF in their environments since electricity is a fundamental part of technologically-advanced societies. It would, therefore, be necessary to determine whether the exceedance of the pre-operation measurement was caused by the new Cable or some other source or combination of sources.

Third, it also would be relevant to consider the magnitude of the exceedance. The calculated MF levels for the Project are a small fraction of the human exposure guideline levels established by respected public health organizations based on the best science available. Exponent concluded that:

The calculated magnetic-field levels for all configurations are far below ICNIRP (2,000 mG) or ICES (9,040 mG) guidelines for public exposure. The Project design is consistent with the goal of the EFSB and WHO for reducing exposure to magnetic fields and the calculated magnetic-field levels decrease rapidly with distance.

Magnetic Field Assessment, Exponent (May 7, 2019), at 15.

Lastly, to carry out its mandate to determine whether a proposed energy facility is "consistent with current health, environmental protection, and resource use and development policies as adopted by the commonwealth" (G.L. c. 164, § 69J), the Siting closely examines EMF impacts. In this case, the Siting Board heard evidence and determined that "based on the design and operation of the Project... the magnetic field impacts of the Project along the Primary Route would be minimized." EFSB Final Decision, EFSB 19-04 / DPU 19-77 19-78 (Oct. 8, 2021) at 103 (provided as **Exhibit H**)).

2. Please have an NEP representative present at the hearing who is knowledgeable about and can discuss the exposed line proposed to be constructed under the Memorial Bridge, and specifically what EMF levels are expected at that location.

NEP directs the Council's attention to Table 3 on page 7 of Exponent's *Magnetic Field Assessment*, which shows the calculated MF levels on the bridge (see row labelled "XS-4 Bridge"). The new Cable will be installed along the underside of the Veterans Memorial Bridge at approximately 5 feet below the surface on the Waite Street to Beverly #12 portion of the route. At 10 feet from the Cables the magnetic field under typical average loading will be between 10-12 mG that is quite similar to the magnetic field values calculated for majority of the route where the Cable is in the delta configuration.

3. Please have an NEP representative present at the hearing who is knowledgeable about and can discuss the Company's choice not to pursue a transmission line route through the MBTA Right of Way ("ROW"). Specifically, the City Council notes that, in NEP's application to the EFSB, it states:

The MBTA is under a federal mandate to install a Positive Train Control ("PTC") system along the entire length of the Newburyport/Rockport corridor. Engineering for the proposed PTC is underway; construction is expected to be completed by December 2020. MBTA representatives have indicated that, to avoid any potential conflicts during installation, maintenance, or operation of either system, the MBTA would not approve the installation of another utility line within the corridor until the PTC system is installed. Thus, the MBTA ROW would not be available to NEP until 2021 at the earliest.

[i] Please provide updated information regarding the status of the PTC system, including its actual or expected completion date; [ii] whether the MBTA ROW would now be available to NEP; [iii] whether, in NEP's view, the decision in EFSB 19-04 or other circumstances preclude reconsideration of the use of the MBTA ROW; or [iv] whether NEP is prepared to take up the offer of Senator Lovely and Representative Parisella to assist with facilitating access to the MBTA ROW.

#### Response:

- [i] Following the March 21<sup>st</sup> hearing, NEP contacted the MBTA Chief Railroad Officer, Ryan Coholan, who advised NEP as follows:
  - The MBTA's Positive Train Control (PTC system) has been installed.
  - The MBTA's Automatic Train Control (ATC) system is scheduled to be installed this fall/winter, throughout the ROW.
  - The MBTA's Fiber Optic Resiliency (FOR) project is currently in design, with installation dates to be determined.

Mr. Coholan stated that with the new PTC infrastructure in place, the soon-to-be installed ATC infrastructure, and the future FOR project, the MBTA ROW's limited underground

availability/capacity will be even more limited. Further, he noted that even without these systems the existing cable within the MBTA ROW has been a source of train delays and impacts to MBTA operations.

The City's expert, Tetra Tech, made similar findings regarding MBTA projects:

Based on response to date, the MBTA needs to complete the PTC project before any additional work within the ROW was approved. Further, it is likely that the Fiber Resiliency project will follow the PTC project further impacting any new construction in the RR ROW. At this time, it appears that the PTC project will be completed by 2025 (possibly earlier). However, the Fiber Resiliency schedule is unknown putting the potential construction new N-192 project in a state of uncertainly even if approved. The MBTA has numerous other initiatives currently in process including multiple bridge replacement projects. Not only will these projects likely impact access to the ROW for new construction but will also likely be an issue for acquiring required MBTA support including flagmen and signal staff. The new PTC system will add communication structures, cabinets, equipment, and conduits resulting in additional constraints and difficulties for the proposed N-192 115 kV transmission line to navigate through when combined with several active MBTA train stations existing landings, structures, equipment, and underground piping.

TetraTech, at 8.

- [ii] The MBTA's completion of its PTC project does *not* mean that the MBTA ROW is now available for NEP to install the new Cable. As NEP has said consistently, the MBTA ROW simply is not feasible from a safety, constructability and reliability perspective. The City's expert "concur[s] with ECE's findings where there are many significant challenges in constructing the proposed N-192 115Kv line either below grade or overhead which will most likely prohibit and/or significantly delay the construction of the proposed line." TetraTech, at 7. Further, TetraTech found that:
  - "It is highly unlikely that National Grid could meet compliance with the Directorate requirements and would need to obtain special approval for numerous items and possibly have to demonstrate that there are no other viable alternatives to construct the electric transmission line."
  - "it is evident that there is very limited space within the RR ROW to construct the proposed transmission line and the allowable setback requirements"
  - "the MBTA will not allow new work within the limits of their existing ROW until such time their federally mandated Positive Train Control (PTC) system is operational with an anticipated schedule of completion in year 2025 as well as the fiber resiliency project in which the schedule is currently unknown.
  - There is a "very high probability of encountering ledge below grade which will need to be removed by mechanical means (hoe ramming) which slows production, is noisy, and has increase[d] cost.

• "much of the proposed transmission line would need to be installed outside of the zone of influence of the existing RR tracks amongst other things. That being the case, the proposed transmission line would most likely be installed at the outer edges of the ROW or potentially in new easements, which will require significant permitting for tree removal changing the landscape for the residents abutting the RR ROW."

TetraTech, at 7-8.

Even if the MBTA ROW were feasible, the MBTA's current and future projects will occupy the ROW for many years. The MBTA and NEP could not construct in the ROW at the same time meaning that, at a minimum, the Project would be delayed for several years. Further, the MBTA's plans to install additional structures and improvements within the ROW make it uncertain that there would be any space left for the Project.

[iii] The EFSB's final decision is silent on the question of whether it would reconsider the use of the MBTA ROW. The Siting Board conducted a full evidentiary hearing on Project and ultimately concluded that "the Primary Route is preferable to the Noticed Alternative Route with respect to environmental impacts, and that environmental impacts along the Primary Route would be minimized." Final Decision, at 104. NEP believes that there is no chance that the Siting Board would agree to reconsider its final decision.

Indeed, there has been no new evidence presented that would justify the EFSB reconsidering, let alone changing, its decision. To the contrary, the only new evidence that has been developed since the EFSB's decision is the report of the City's own expert, TetraTech, which only confirms that the MBTA ROW is not a viable route.

[iv] NEP does not believe that it would be prudent or fair to ask Senator Lovely or Representative Parisella to spend their time advocating for access to the MBTA ROW when NEP has determined that the MBTA ROW is infeasible; the City's expert has concurred with that determination; the MBTA already thinks that the existing cable interferes with its operations and that its multiple pending projects will only make that situation worse; and the Siting Board has determined that the route pending before the City Council is superior to all other alternatives.

In closing, in light of your comment that in order for the City Council to develop its record that NEP should also submit to the City Council any information that has already been provided to other City officials or departments, NEP provides the Memorandum of Agreement between NEP and the City of Beverly (**Exhibit I**).

The Company looks forward to continuing the public hearing on Monday.

Sincerely,

Assistant General Counsel & Director

cc: Tim O'Leary, NEP Faith Hassle, NEP

## Enclosures

Exhibit A	Technical Drawings
Exhibit B	Technical Specifications for the Beverly #12 Substation Transformer
Exhibit C	Beverly 12 Substation Revised Preliminary Sound Modeling Analysis, Tech
	Environmental (Feb 11, 2019)
Exhibit D	Rodent Control Plan
Exhibit E	Post-Review Discoveries Plan, The Public Archaeology Laboratory, Inc. (Sept.
	2021)
Exhibit F	Memorandum from PAL (Sept. 16, 2020)
Exhibit G	Dust Control Plan
Exhibit H	EFSB Final Decision, EFSB 19-04 / DPU 19-77 19-78 (Oct. 8, 2021)
Exhibit I	Memorandum of Agreement